REMARKS

Claims 1-5, 9, 11, 28-35, and 38-48, 52-59 and 63 were rejected. Dependent claims 6, 7, 49-51, and 60-62, directed to a non-elected species, are withdrawn from consideration pending allowance of a generic claim. A petition for a three-month extension of time is filed herewith and this response is thus timely filed. Applicant requests reconsideration of the pending rejections based on the following remarks.

Response to Pending Rejections

A. ***Rejection under 35 U.S.C. 112***

Claims 53-59 and 63 were rejected under 35 U.S.C. 112 as indefinite, based on the naming of the means in independent claim 53. This rejection is respectfully traversed. It is common practice to provide a tag name such as "pan means" for each means in a claim including several mean-plus-function elements, so that these elements can be conveniently referenced later in the claim or in dependent claims without repeating the entire means-plus-function language defining the element. If this common practice rendered claims indefinite, a substantial percentage of the patents issued by the USPTO would contain indefinite claims.

Claim 53 is clearly understandable when properly interpreted according to the statute. The scope and interpretation of means-plus-function claims is defined by 35 U.S.C. 112, sixth paragraph, which states:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

Claim 53 recites "pan means for holding food items during preparation or service thereof." The specified function of the recited "pan means" pursuant to the statute is "holding food items during preparation or service thereof." This function is performed, for example, by the various pans disclosed in the specification. Therefore, under the statute, the "pan means" must be construed to cover the structures disclosed in the specification that perform the recited function of "holding food items during preparation and service," for example pans, and any equivalent structures.

Similarly, claim 53 recites "contoured bottom edge means for providing a sealed bottom of said liner means and preventing the collection of food in a corner of said liner means when installed in said pan means...." By statute, the recited "contoured bottom edge means" must be construed to cover the structures disclosed in the specification for "providing a sealed bottom of said liner means and preventing the collection of food in a corner of said liner means when installed in said pan means" and equivalents thereof.

No functions of "panning for gold" or "cutting at the edge by scissors" are recited in the claims, nor are such functions disclosed in the specification. Any suggestion that the claim involves such features is therefore contrary to the clear instruction of the statute on interpretation of means plus function claims.

When read in view of the statutory requirements for interpreting these claims, they are clear and definite, and this rejection should therefore be withdrawn.

B. ***Rejection under 35 U.S.C. §102(b)***

Claims 38, 42-45, and 53-56 were rejected under 35 U.S.C. §102(b) over U.S. Patent 4,320,699 to Binks.

Claim 38 recites that polymeric material of the liner is "formed in the shape of a bag having side edges and a contoured bottom edge, said contoured bottom edge having a single substantially linear central edge portion and two contoured edge portions, each of said contoured edge portions extending from a respective end of the single central edge portion and joined to one of said side edges."

Binks discloses (in Fig. 2) a flat sheet of Teflon. This sheet does not have the recited bag shape or contoured edge arrangement. The Office Action asserts that when the flat sheet is placed in and supported by the side walls of a pan, it somehow acquires the claimed bag structure. However, the claim recites a particular structure of the *liner*, not the pan. Binks fails to disclose at least the following features recited in claim 38:

a. "said polymeric material being formed in the shape of a bag." A bag is defined, for example, as "a container of flexible material, such as paper, plastic, or leather, that is used for carrying or storing items." American Heritage Dictionary of the English Language, 4th Edition, Houghton Mifflin, 2000. A flat sheet of polymeric material is not a container and therefore

cannot be accurately described as "formed in the shape of a bag." Binks puts a flat sheet in a pan so that it is temporarily held in a generally concave shape by the walls of the pan, but this installation does not change the *structure* of the sheet to turn it into a bag or other form of container.

b. The "side edges" and the "contoured bottom edge" that is joined to the side edges. An edge may be defined, for example, as "the line of intersection of two surfaces," or "the area or part away from the middle; an extremity." *Id.* The Binks structure is a flat sheet, and its only edges are at the edges of the sheet. The part of the Binks sheet that lies along the intersection of the pan bottom and side walls is not an edge, i.e. an intersection of different surfaces or parts of the Binks structure. It is no different from any other part of the Binks sheet, and therefore cannot be an "edge" of that sheet. The Examiner's interpretation seeks to arbitrarily define an "edge" in the middle of a flat liner sheet, based on a temporal alignment of that sheet with another object. As can be seen, the Binks sheet as shown in Figure 2 has no actual structural features corresponding to the recited edges. In the end, the "edges" the Office Action identifies in Binks are actually junctions of the pan sides and bottom, rather than edges of the liner sheet. Claim 38 recites these structural features as part of the *liner*, not the pan.

c. A "single substantially linear central edge portion" and "two contoured edge portions extending from a respective end of the single central edge portion and joined to one of said side edges." The claim recites a central linear edge portion and two contoured edge portions, yet the three corresponding

segments proposed by the Examiner are identical and none have any "contoured" characteristics. They are merely imaginary lines in the middle of a flat sheet laid in a pan.

For at least these reasons, Claim 38 cannot be reasonably interpreted so that its specific recitation of structural liner features is anticipated by nothing more than a flat sheet such as that disclosed in Binks. Reconsideration of the rejection of claim 38 is appropriate.

Independent claim 42 recites a pan liner formed with "two polymeric sides meeting at side edges and at a single contoured bottom edge and having open top edges, said contoured bottom edge having a single central edge portion and two contoured edge portions extending outwardly from each end of the single central edge to meet said side edges." This claim also recites that the polymeric sides are *bonded* together along at least the two contoured edge portions and side edges.

The arguments set forth above with regard to claim 38 apply also to claim 42 and its dependent claims 43-45. Further, the flat sheet of Binks cannot have sides "bonded together along at least the two contoured edge portions and side edges" as recited in claim 42. Where is the bond? For at least these reasons, claim 42 and its dependent claims 43-45 are not anticipated by Binks. Reconsideration of the rejection of claims 42-45 is appropriate.

Independent claim 53 recites, among other things, a "liner means for lining said pan, said liner means formed as a bag comprising two polymeric sides *meeting at sealed side edges* and having open top edges," and a "contoured bottom edge means

having *a single central edge portion and two contoured edge portions extending from each end of the single central edge portion to meet said side edges*" (emphasis supplied).

The Binks patent, as noted above, discloses a flat sheet liner. Binks lacks at least the following liner features recited in claim 53:

a. "two polymeric sides meeting at sealed side edges." There are no "sealed" side edges in Binks. Binks' flat sheet does not include any seals.

b. "contoured bottom edge means having a single central edge portion and two contoured edge portions extending from each end of the single central edge portion to meet said side edges." Binks does not have a single central edge portion and two contoured edge portions connected to the recited sealed side edges.

For at least these reasons, Binks cannot be held to anticipate claim 53 and its dependent claims 54-56. Therefore, reconsideration of this rejection is appropriate.

C. ***Rejections under 35 U.S.C. 103***

Rejection of Claims 1-5, 9, 30-35, 38, 42-48, 52-59, and 63

Claims 1-5, 9, 30-35, 38, 42-48, 52-59, and 63 were rejected under 35 U.S.C. §103 ("103") based on U.S. Patent 4,320,699 to Binks, in view of U.S. Patent 3,357,152 to Geigel and U.S. Patent 4,759,642 to Van Erden.

1. A Prima Facie Case of Obviousness Has Not Been Established.

With respect to these claims, initially, the proposed combination fails to make out a prima facie case of obviousness.

a. The Examiner Bears the Burden of Establishing a Prima Facie Case of Obviousness

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a *prima facie* case of obviousness based upon the prior art. *In re Piasecki*, 745 F.2d 1468, 1471-73 (Fed. Cir. 1984). If the examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992).

b. There is no Motivation for the Proposed Modifications to the Base Reference.

The rejected claims recite specific structural features of a food service pan liner. For example, independent claim 1 recites in part:

> a *pre-formed bag-shaped body* having: a *single contoured bottom edge* forming a closed bottom end disposed over said pan proximate said bottom panel, wherein said contoured bottom edge has a *flat bottom edge portion and contoured edge portions extending from said flat bottom edge portion, with said flat bottom edge portion joined and merged at each end with one of said contoured edge portions*...." (emphasis supplied).

Similarly, claim 32 recites a pan liner with a "pre-formed contour fit" and "one and only one contoured bottom edge" with a flat bottom edge portion and two contoured edge portions that extend from the flat bottom edge to be joined and merged with a side wall edge. Claim 34 recites a "pre-formed bag shaped body" with "two flexible side walls" and a contoured bottom edge at a junction of the side walls including contoured edge portions. Claim 38 recites polymeric material "formed in the shape of a bag" with a "contoured bottom edge having a single substantially linear central edge portion and two contoured edge portions...." Claim 42 recites a liner with two polymeric sides meeting at side edges and at a single contoured bottom edge, with the "polymeric sides bonded together along at least said two contoured edge portions and said side edges." Claim 53 recites "liner means formed as a bag comprising two polymeric sides meeting at sealed side edges and having open top edges" and having contoured edge portions.

In the manner noted above, these claims define a pan liner that has either a "pre-formed bag shaped body" or in some cases, a bag with two sides meeting at

sealed edges, and a single central bottom edge portion and two contoured edge portions connecting the bottom edge portion to the side wall edges.

The primary reference, Binks, discloses a flat sheet of TFE for lining a food vessel. Binks does not disclose or suggest a pre-formed bag-shaped body, or one with a single contoured bottom edge. The Office Action asserts that the Binks liner becomes substantially limp and hugs the surface of the pan when heated. However, even if this is true, the Binks structure is still merely a sheet placed within a pan, and does not have the structural features recited in any of these claims. Whether it is in the pan or removed from the pan, the Binks sheet will still have a sheet structure rather than a bag structure. In fact, Binks makes no suggestion and provides no motivation for a *pre-formed bag* with the specific claimed structure.

In an attempt to remedy these and other deficiencies of Binks, the Examiner added the Geigel and Van Erden patents to the rejection. Geigel shows a corner-cut thermoplastic bag. However, this bag is not a pan liner and is not heat resistant; it is designed and configured for use in continuous industrial packaging operations, such as making bags of cement, fertilizer, and other granular materials. Similarly, Van Erden shows a corner-cut cereal box liner designed for filling in a cereal box packaging line. Again, this is not a food service pan liner. The bags of Geigel and Van Erden have very different purposes, and neither is designed to contain wet food or to be used in cooking. A person of ordinary skill in the relevant art would not look to either the Geigel or Van Erden patents for teachings applicable to a food service pan liner.

A prima facie case of obviousness requires a motivation that would lead a person of ordinary skill in the art to modify the structures disclosed in the references to produce the claimed invention. In other words, there must be some teaching in the cited references that would lead a person of ordinary skill to modify the Binks structure to be like Geigel or Van Erden. In this case, there is nothing in any of the cited references that would realistically lead a person skilled in this field to put structures like those in Geigel or Van Erden into a food service pan.

As will be seen, the Office Action ultimately relies on hindsight. Hindsight is defined as the use of the claimed invention as an "instruction manual" or "template" for piecing together the teachings of the prior art so that the claimed invention is rendered obvious, and this is not permitted. *See e.g. In re Fritch,* 972 F.2d 1260, 1266 (Fed. Cir. 1992).

The Office Action appears to recognize and admit that the cited references are not pan liners, and provide what is described as a "corner cut feature" to solve specific problems experienced in industrial packaging lines. Further, the Office Action recognizes that the packaging field motivations do not apply in the realm of food service pan liners. However, at page 8, lines 13-19 of the Office action, the Office Action dismisses that logical defect, asserting that "the solution of a corner cut structure is the same as that employed by the inventor in this case." The Office Action then makes the statement that "[i]t doesn't matter that a different problem is solved, the result is that it is obvious for a different reason to solve a different problem...."

In other words, the Office Action seems to take the position that any motivation will do--the motivation need not be relevant to the problem addressed by the invention and need not apply in the context of the invention. Thus, the Office Action reads out of the law the requirement that there must be an actual motivation that would lead a person working in the relevant art to construct the invention. In effect, the Office Action asserts that if the claimed structures can be selectively pieced together from the cited references, they are obvious. This is contrary to U.S. patent law, as noted above with reference to the *In re Fritch* case.

The pending application explains the problem identified by the inventor and demonstrates the solution, and the evidence submitted demonstrates the unobviousness of that solution. Armed with the benefit of the hindsight knowledge presented in the application, the Patent Office has found an analogous shape in a totally different type of bag designed for industrial packaging operations, and has rejected all of the pending claims, with no explanation of why a person of ordinary skill would be motivated to apply that shape *in the claimed context* of a food service pan liner.

The rejection is based on:

a. A reference (Binks) showing a method of lining a cooking pan, but disclosing only a flat sheet of TFE as a liner. Binks fails to disclose or suggest any type of bag shaped structure for this purpose, let alone a structure with the claimed contoured edge portions.

b. A reference (Geigel) where a completely different type of bag produced for a different context is formed with corner cuts. The

Geigel bag is not heat resistant, and is designed and sized for use in continuous industrial packaging operations, such as making bags of cement, fertilizer, and other granular materials.

c. Another reference (Van Erden) where yet another type of bag that is not a pan liner has a corner-cut structure. Van Erden discloses a cereal bag designed to be filled in a cereal box packaging line.

What is missing from these references is anything that would rationally motivate a person of ordinary skill in the art, who is looking at the Binks structure, to do any of the following:

a. Recognize and understand the problems of (1) poor fit of food service pan liners, (2) cost and difficulties of manufacture, (3) difficulty of use, and (4) food collecting in corners of a food service pan liner, and recognize that these problems contributed to the lack of widespread adoption of commercial food service pan liners.

b. Address these problems by redesigning the Binks liner to be a formed bag rather than a plain sheet, especially when Binks teaches directly away from such a redesign. "An important object of the present invention is to...provide a liner which is efficient, inexpensive, easy to use, having the attributes of...ready adaptability to heated cooking surfaces without special forming or treatment requirements." Binks, Col. 1 lines 39-48.

c. Redesign Binks to solve the problem of food collecting in the corners of a bag-shaped liner, when Binks teaches a liner that has neither a bag

shape nor any corners where food would collect, and obviously doesn't benefit from such redesign.

d. Examine bag structures used in the industrial packaging field for bulk dry materials on automated fill assembly lines, and choose such a structure as a basis for making a food service pan liner.

e. Select, in particular, a corner-cut bag shape out of a plurality of possible shapes and designs available for use on industrial packaging lines, and conceive that there would be advantages if a pan liner having that general shape were made out of a different material and installed in a particular manner in a food service pan.

f. Looking only at the bags of Geigel and Van Erden whose sole disclosed purpose is to be filled with dry bulk material by an automated system and then stacked or boxed, anticipate the results that would be obtained if a food service pan liner were modified to include certain features of these bags.

g. Find any reason (absent hindsight) to add the corner cut feature to a specific type of pan liner, when the "advantages" of the corner cut feature disclosed by Geigel and Van Erden apply only in the field of industrial packaging lines, and there is no motivation cited that would be viewed as relevant by those designing cooking pan liners.

It is well settled that invention may lie in the mere recognition of a problem as well as in the discovery of a solution. The present invention provides an inexpensive solution to the problem of collection of food in the corners of a pan liner. The Binks

design uses a flat sheet that conforms to the shape of a vessel. The Binks liner has no bag structure, and therefore no corners that might fill with food. None of the references relied upon for the rejection recognize or discuss this problem as it applies to food service pan liners.

The Office Action proposes four motivations for modifying Binks in the manner proposed, all taken from the context of the Geigel and Van Erden bags for automated filling operations. These asserted motivations are: (1) eliminate a tendency to snag, (2) improve stackability, (3) avoid cumbersome procedures of gusseted bag manufacture, and (4) free the bottom corners of the bag from interfering with easy reception and packing of the filled bag in a close fitting carton.

These "motivations" suggested by the Office Action do not provide any apparent value in the context of a food service pan liner, and are particularly irrelevant in the context of Binks. For that reason, they would not motivate a person of ordinary skill in this art to apply such structures in the context of a food service pan liner.

With regard to motivation (1), avoiding "snagging of the bag" in the sense indicated by Geigel or Van Erden has no relevance to food service pan liner applications. A food service pan liner is typically installed in a pan by hand, and there is no problem with snagging during that installation. A food service pan liner is not filled, processed, or installed in a carton mechanically as in the case of the Geigel or Van Erden production product containers. Again, the type of snagging that might occur during these automated processes is a non-issue in the field of pan liners. Further, the flat sheet structure of Binks already inherently lacks a tendency to snag

anything, so why would a person of ordinary skill in the art be motivated by this teaching to modify Binks as suggested?

With regard to motivation (2), stackability may be relevant in filling bags of fertilizer, but it is not a goal in making a food service pan liner. Pan liners will not be filled with material and stacked on pallets. Further, the Binks sheets are not capable of holding food by themselves, and inherently cannot be filled and stacked. Thus, a teaching that the Geigel or Van Erden structures have "improved stackability" would mean nothing to a person of ordinary skill working on a cooking pan liner.

With regard to motivation (3), Binks has already avoided the "cumbersome procedures of gusseted bag manufacture" by using a flat sheet. Therefore this suggested motivation teaches away from making the proposed modifications to Binks. Further, to applicant's knowledge, gusseted bags have not been used as high temperature pan liners in the food service industry. The suggestion of eliminating gusset structures would not provide any meaningful motivation in the field of food service pan liners, and would not lead to the claimed invention, since gusseted structures are not typically used in the field of food service pan liners.

With regard to motivation (4), the issue of "interfering with easy reception and packing of the filled bag in a close fitting carton" is again relevant only to the automated bag filling and carton stuffing operations of the Van Erden disclosure. Issues relating to packing a bag into a close fitting carton have no motivating value in the field of food service pan liners. A person of ordinary skill in this art would not be led to modify the Binks pan liner to make it easier to pack it into a close fitting carton, since that person would have no desire to pack the pan liner into a carton.

As the foregoing discussion illustrates, the patents cited in the Office Action do not provide any suggestion or motivation that would logically lead an artisan to modify Binks to obtain the invention claimed in the present application. It is only with the benefit of hindsight, using applicant's own disclosure as a blueprint, that a person of ordinary skill in the art would select, from the many diverse bag structures that have been developed, bag shapes related to those shown in Van Erden and Geigel, create these bag shapes from high temperature material, and then substitute these structures for conventional food service pan liners and install them in a particular manner in a food service pan.

Rejection of Claims 11, 28, 29 and 39-41

Dependent claims 11, 28, 29 and 39-41 were rejected under 35 U.S.C. §103 ("103") based on the same combination set forth above, with the addition of the M&Q Brochure submitted by applicant.

These dependent claims recite the use of specific materials to form the claimed pan liner. These claims are dependent on claims that are patentable for the reasons set forth above, in the response to the 103 rejection based on Binks, Geigel, and Van Erden. The arguments made in response to that rejection apply with equal force to this rejection. In particular, for the reasons explained previously, the combination of Binks, Geigel, and Van Erden fails to provide motivation for the proposed combination and therefore does not make out a valid prima facie case of obviousness as to the pending claims.

The M&Q Plastic Products brochure, a document created by the assignee of the present invention to advertise conventional square bottom pan liners, was cited by the Examiner in relationship to these dependent claims. The M&Q Brochure discloses pan liners constructed from specified materials. However, the M&Q Brochure does not disclose a contour edge feature or any of the other distinguishing features recited in the pending independent claims. Therefore, the addition of the M&Q brochure does not remedy the deficiencies of the Binks/Geigel/Van Erden combination in the context of this rejection.

Rejection of Claims 1-5, 9, 11, 28-35, 38-48, 52-59 and 63

All of the pending claims (1-5, 9, 11, 28-35, 38-48, 52-59 and 63) were also rejected under 35 U.S.C. §103 ("103") based on the combination of U.S. Patent 2,542,413 to Ibsch or U.S. Patent 4,828,134 to Ferlanti, in view of U.S. Patent 4,320,699 to Binks, U.S. Patent 3,357,152 to Geigel, U.S. Patent 4,759,642 to Van Erden, and the M&Q Brochure submitted by applicant.

This last rejection is a 103 rejection combining all of the references used in the 103 rejections discussed (and discredited) above. This rejection substitutes U.S. Patent 2,542,413 to Ibsch or U.S. Patent 4,828,134 to Ferlanti for Binks as the base reference, relegating Binks to a supporting role.

Neither the Ibsch patent nor the Ferlanti patent supplies the missing elements needed to make a prima facie case of obviousness. There is no motivation in the cited references for the proposed modifications to Ibsch or Ferlanti, any more than there

was any motivation to modify Binks. The analysis set forth previously relating to alleged motivations for the combination, and the failure of evidence as to any motivation, applies with equal force to this proposed combination.

Upon inspection of Ibsch and Ferlanti, it will be seen that like Binks, they merely disclose flat sheet liners that conform to the shape of a vessel. Like Binks, these liners have no bag structure, and therefore no corners that might fill with food. Like Binks, Ibsch and Ferlanti do not teach or suggest a liner having joined edges, let alone any of the claimed structural features, such as a bag with a contoured bottom edge.

If anything, the motivation for this proposed combination is even more suspect than the motivation for the above combinations. Ibsch and Ferlanti clearly describe the benefits of a multi-layered lining system and have the objective of providing multiple layers that can be removed as they are used. The proposed replacement of their flat sheets by the Van Erden or Geigel bags, taking into account the clear teachings of the references, would presumably require nesting or "stacking" of the completed bags in the cooking vessel. In a practical sense, assembly of the bags of Van Erden or Geigel into nested structures for use as liners would be much a different and more complex problem than a similar assembly of flat sheets. Certainly it is not a problem contemplated by either of these references. A person of ordinary skill in the art, looking at all of the references relied upon by the Office, would be motivated by these factors against replacing the flat sheets with the claimed bag structures and would see no benefit to such a replacement, since none of these references makes any suggestion of why such a combination would be desirable or beneficial. Thus, the

combination of Ibsch or Ferlanti with the other references, in fact, provides a particularly strong teaching away from the present invention.

I. Conclusion

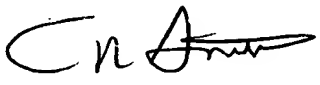
The references relied upon for the pending rejections illustrate simple technologies. The Ibsch patent issued in 1951, with the similarly-structured Binks and Ferlanti patents following in 1982 and 1989. The Geigel patent issued in 1967, followed by Van Erden in 1988. The essential structures relied upon in the rejections have thus been known for decades, and have been the subject of continuing improvements. It is reasonable to ask why, if the invention was obvious, was it never developed by another during that long period?

The answer is clear. This invention was not obvious. This conclusion is confirmed by the overwhelming direct evidence of patentability in the case record. When the inventor developed the claimed products, they were met with initial skepticism, but since then they have been embraced by a growing segment of the food service industry. The commercial success of the invention is confirmed by the evidence of record, showing steadily increasing sales in seven figures and the fact that the industry strongly prefers the inventive designs over the prior art square bottom bags. Even more telling, an increasing number of customers vote for this invention with their money, by specifying the inventive pan liners to the exclusion of competing products lacking the inventive feature, even though the competing products might be less expensive.

It is believed that this application is now in condition for allowance. Reconsideration of the pending rejections and a notice of allowance are earnestly solicited. If the Examiner believes a telephone or personal conference would expedite prosecution, he is invited to contact the undersigned, who will cooperate appropriately.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



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